

# Relationship between workaholism and personality factors among nurses: a questionnaire-based cross-sectional study

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## ABSTRACT

**Background:** Workaholism phenomenon is most commonly observed in the jobs that require a high amount of mental and physical energy of employees, and can cause positive and negative consequences. The present study was aimed to study the relationship between workaholism and personality factors among nurses working in teaching hospitals of Sanandaj city.

**Methods:** This study is descriptive-cross sectional analysis study. The population study consisted of 500 nurses working in different wards of training hospitals of Sanandaj city, which among those, 218 nurses were randomly selected. Data collection tools consisted of a three parts-questionnaire that includes demographic characteristics, Spence and Robbins workaholism questionnaire, and Neo Zhang questionnaires for measuring personality factors. The obtained data were analyzed by Spss software (version 16) using descriptive and inferential statistics.

**Results:** The results showed that more than 50% of nurses had high level of workaholism. In this regard, the most common workaholism was attributed to inner desire to job. Among the personality factors, the responsibility in nurses was found to be the greatest common factor. In general, there was an inverse relationship between workaholism and personality factors.

**Conclusion:** Results indicated that there was a high level of workaholism among nurses. So, managers should pay more attention to personality factors of nurses, and consider these factors in the delegate tasks.

**KEY WORDS:** workaholism, personality factors, Nurse.

## 1. INTRODUCTION

Work involves a large part of human life and makes them busy physically and mentally (Schaufeli, 2009). Among various occupations, in some jobs such as medicine and nursing jobs, workers may become addicted to their works, due to intrinsic motivation and extrinsic rewards (Schaufeli, 2009, Herzberg, 2011). Workaholism words is defined as "compulsion or uncontrollable desire to work flawlessly" (Schaufeli, 2008). Workaholism may be pleasant, but boring and causing problems, in a way that even some people considered it as a disease (Herzberg, 2011). Workaholism is different from hardworking. Hardworking people know how management their work to spend enough time with their family and friends (Snir and Zohar, 2008). While, workaholics work hard due to inner compulsion, and the hard working is not attributed to external factors such as financial rewards, professional views, and organizational culture (Schaufeli, 2008). The need to work in these people is too extreme, which it may be a serious health risk to their health, personal happiness, interpersonal relations, and social roles (Gheorghita, 2014). Because, they have unreasonable commitment to hardworking, and they think that are the only ones who can do the job. Then, they become addicted to their works (Gheorghita, 2014). Based on the amount and degree, workaholism is characterized by three components including; involving work (acclimatize to work), inner desire to work (strong fascination to work) and enjoying work (interest to work) (Gheorghita, 2014). Creating an emotional attachment among employees and the joy of membership and participation in the organization are positive results of workaholism (Snir and Harpaz, 2004). On the other hand, the most common negative consequences of workaholism are attributed to high levels of stress and conflict between work and family. Increased health problems (physical and psychological), job burnout, occurring problems in teamwork disruption in family relationships, low satisfaction with life, and loss of enjoyment of leisure time (Elgar, 2006, Piotrowski and Vodanovich, 2008). Workaholism may be a main cause of burnout in employees with excessive work (Innanen, 2014, Spence and Robbins, 1992). Several factors affect the formation of workaholism including demographic characteristics (age, sex, type of job), environmental features, and working conditions (Spence and Robbins, 1992). The type of personality and behavior in organizations can also affect the formation of workaholism.

Therefore, workaholism can be investigated in term of personality of people (Spence and Robbins, 1992, McMillan, 2003). Five-factor model (big five) is one of the most conventional models in evaluating of personality, which has been used to measure all dimensions of personality and it is yet the most reliable tool (Shariat, 2012). These five factors include extraversion (being a person comfortable in relationships), adaptation (agreeableness) conscientiousness with a conscience (the trustworthiness of the person), neuroticism-emotional stability (person's ability to tolerate irritants and stress and stressors) openness to experience (the interest and fascination of an

individual towards new experiences) (Shariat, 2012). Nurse occupant is one of the jobs that has potential of workaholism and can lead to burnout in them.

By considering the possibility of workaholism formation in people who are working in healthcare environments such as nurses, and also its adverse effects on their life, it is necessary to study personality characteristics of nurses. Also, identifying facilitator and moderator factors in the formation of workaholism can be useful in the identification and better management of this phenomenon. Given the importance and lack of enough information about workaholism phenomenon, the present study aimed to determine the relationship between workaholism and personality in nurses working in training hospitals of Sanandaj city.

## 2. METHODS & MATERIALS

**Methods:** This study is descriptive-cross sectional analysis study. In this correlation matrix study, personality dimensions as an independent variable and workaholism as a dependent variable were analyzed. The study population consisted of nurses working in teaching hospitals (Beast and Tawhid) in Sanandaj city, Kurdistan University of Medical Sciences, who were interested to participate in the study. Population size was about 500 nurses, which was randomly selected. 250 questionnaires were distributed. Of them 218 questionnaires were filled and collected from nurses working in teaching hospitals (Beast and Tawhid) in Sanandaj city. Data collection tools consisted of a three parts-questionnaire that includes demographic characteristics, Spence and Robbins workaholism questionnaire, and NEO Zhang questionnaires to measure personality factors. In order to assess personality dimensions, Five-Factor Model of NEO test group introducing by Zhang, (2003) was used. The questionnaire was scored based on five-point Likert scale (in the range strongly agree= 5, to completely disagree=1, with minimum of 60 scores and maximum of 300 scores). The reliability of the questionnaire was confirmed and standardized by Roshani, (2005), and its Persian version was also accepted. In Anisi, study (2010), Cronbach's alpha coefficient was calculated to be 0.83, which is in the acceptable range (Anisi, 2011). The questions classified into five groups including extroversion(2, 7, 12, 27, 32, 37, 42, 47, 52, and 57 questions), compatibility (4, 9, 14, 19, 24, 29, 34, 39, 44, 49, 54, and 59 questions), conscientiousness (5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, and 60 questions), neuroticism (1, 6, 11, 16, 21, 26, 31, 36, 41, 46, 51, and 56 questions), and openness (3, 8, 13, 18, 23, 28, 33, 38, 43, 48, 53 and 58 questions). In order to measure workaholism, the Spence and Robbins scale (1992) was used with 16 questions (Spence and Robbins, 1992). Workaholism was studied using three factors including enjoying work (7, 8, 9 and 13 questions), inner desire to work (1, 4, 5, 6, 14, 15, and 16 questions) involving work (2, 3, 10, 11, and 12 questions). The questionnaire was scored based on the five-point Likert scale (strongly agree= 5, to completely disagree=1, with minimum of 60 scores and maximum of 300 scores). In order to determine the reliability of the questionnaire, 30 questionnaires distributed and collected. Cronbach's alpha coefficient was 0.75 with 16 questions. Moreover, Shabani, calculated the coefficient reliability of this questionnaire using Cronbach's alpha, which it was equal to 0.85 (SHABANI and TALKHABI). Content validity and face validity were used to assess the validity of the questions and to assess the face validity, the questionnaire was reviewed by ten experts in this field of study.

Then, the questionnaires were collected, summarized and classified using SPSS software (version 18) and were analyzed by descriptive and inferential statistics. In order to analyze Statistical data, the findings were presented in Tables. Moreover, to test the hypotheses, Spearman rank correlation test was used for assessing correlations between variables.

## 3. RESULTS

Of 250 distributed questionnaires, 218 questionnaires were filled (the response rate 85%). Results showed that the most of the participants were female (85.8%), married (67.9%), under 30 years (39.4%) with an average standard deviation of  $34.61 \pm 8.8$ , had a child (47.1%), bachelor of science in nursing (72.9%), about 5-14 years of work experience (39%) with mean and standard deviation of  $10.71 \pm 7.8$  years, had a circular shift (71.6%), with less than 40 hours per week (50.5%), with mean and standard deviation of  $58.49 \pm 32.03$  hours, and without a second job (95.4%) (Table 1). The workaholism was in high level (40.4) in most studied wards (Table 2). In term of workaholism, the greatest amount was attributed to involving work (48.6%) (Table 3).

**Table.1. Personality characterizes of studied cases**

Individual characteristics	Number	Percent	Individual characteristics	Number	Percent
Age (mean and standard deviation of $34.61 \pm 8.08$ )			Sex		
Under 30 years-old	86	39.4	Female	187	85.8
31-40 years-old	78	35.8	Male	31	14.2
and above 41	54	24.8	Number of children		
Marital status			I do not have	69	
Single	59	27.1	One child	39	47.7
Married	148	67.9	Two children	48	22
Divorced and widowed	11	5	Three children to the top	66	31.3
Job level			Education		

Matron and supervisors	6	2.8	Associate Degree	26	11.9
Head nurse	22	10.1	Bachelor	159	72.9
Nurses staff	190	78.2	Master	33	15.1
Shift status			Work history(mean and standard deviation of 10.71±7.8)		
Morning shift	62	28.4	Under 4 year	57	34.4
Circular shift	156	71.6	5-14 years	85	39
Second job			15-24 years	43	19.7
yes	10	4.6	25 years and over	15	6.85
No	208	95.4	Number of work hours per week		
			Less than 40 hours	107	50.5
			41-0 5hours	92	40.7
			51-60 hours	13	7
			61 hours and above	6	2.8
				218	100

Table.2. Frequency distribution of subjects in terms of workaholism in nurses

Distribution of scores Workaholism in nurses	Number	Percent
	Very low 16-28	0
Low 29-41	21	9.6
Average 42-44	84	38.5
High 55-67	88	40.4
Very high 68-80	25	11.5
Total	218	100

Table.3. Dimensions of workaholism in nurses

Mean and standard deviation		0.388±16.86	5.01±25.04	2.35±13.32
Maximum score	Percent	25	35	20
Minimum score	Number	5	7	4
Very high	Percent	8.7	9.6	9.2
	Number	19	21	20
High	Percent	31.7	45.9	25.7
	Number	69	100	56
Average	Percent	48.6	39.9	45.9
	Number	106	87	100
Low	Percent	9.2	2.8	16.5
	Number	20	6	36
Very low	Percent	1.8	1.8	2.8
	Number	4	4	6
Workaholism factors		Next involving work	Inner desire	Enjoying work

The results of personality characteristics of studied nurses showed that after involving dimension, the amount of each dimension were as follows: the responsibility (56.9%) as highest level, neuroticism (61.5%), desire to work (2.75%), compatibility (49.5%) as average level, and finally extroversion (75.7%) as lowest level. According to the results of this study, the mean and standard of responsibility factor as the highest level was 37.4±5.7 (Table 4).

Table.4. Dimensions of personality factors in nurses

Personality factors		Neuroticism	Extroversion	Desire to work	Compatibility	Responsibility
Very low	Number	1	165	0		0
	Percent	0.5	75.7	0		0
low	Number	40	46	36	12	4
	Percent	18.3	21.1	16.5	5.5	1.8
Average	Number	134	0	164	108	65
	Percent	61.5	0	75.2	49.5	29.8
High	Number	43	7	18	94	124
	Percent	19.7	3.2	8.3	44	56.9
Very High		0	0	0	2	25
		0	0	0	0.9	1.7
Minimum score		16	22	23	24	28

Maximum score	49	46	47	55	59
Mean (SD)	39.25.8±	37.7±3.9	28.7±4.1	33.6±5.6	37.4±5.7

In the comparison of workaholism and personality dimensions, a negative and significant relationship was observed between workaholism and neurotic dimension by t-test statistical analysis. This results indicated that the score of neuroticism increased with increasing workaholism. While, there was a positive significant relationship between eager to work and compatibility dimensions ( $p < 0/0001$ ). On the other hand, there was no significant relationship between extraversion and accountability dimensions and workaholism (Table 5).

**Table.5. Comparing scores of personality dimensions of workaholism**

Personality dimensions	Workaholism	Mean (SD)	Mean difference	statistical test	
				t	P
Neuroticism	Do not have 17	27.59±5.6	-8.07	-4.83	0.000
	Have 201	35.67±6.7			
Extroversion	Have 17	34.82±6.15	1.8	1.53	0.1
	Have 201	33.02±4.51			
Desire to work	Do not have 17	38.41±5.6	4.28	3.55	0.000
	Have 201	34.12±4.7			
Compatibility	Do not have 17	47.71±3.85	7.94	4.88	0.000
	Have 201	39.67±6.6			
Responsibility	Do not have 17	47.24±9.52	2.53	1.46	0.1
	Have 201	44.7±6.6			

In the study of relation between five dimensions of personality and three areas of workaholism, the neurosis had a statistically significant correlation with all three areas of workaholism ( $P < 0.0001$ ). There was no significant correlation between extroversion and none of the fields of workaholism. Eager to work and desire to work and compatibility were negatively correlated to three areas of workaholism. While, there was only a significant negative relationship between responsibility and involving work (Table 6). In general, there was an inverse correlation between personality factors and workaholism ( $p < 0/0001$ ).

**Table.6. Correlation coefficient of personality factors and workaholism in all studied nurses**

	All personality factors	Total score of workaholism
Personality factors	1	-0.28
Pearson correlation coefficient		0.000
Number	218	215
Total score of workaholism	0.28	1
Pearson correlation coefficient	0.000	
Number	215	215

In the present study, workaholism in about half of all nurses was in high level, which the highest rates was attributed to involving work. These results are inconsistent with Shabani, study (2011). They reported that the majority of teachers in university physical education had workaholics at high levels (SHABANI and TALKHABI). In this regard, it can be said that nursing is one of the most difficult and demanding jobs. It should not be expected that anyone with any ability can undertake this job. Also, the relationships between variables in other occupations that are relatively simple and difficult, may not be applied in this job. As it is clear that having the required expertise in nursing job is necessary, but the expertise alone is not enough to stay. Passion and commitment to the work are also essential in this job. Those who remain in nursing job have a high commitment to their work, and they have accepted their working conditions. Also, in term of attitudes, they have matched with it. Results showed that the highest score of personality factors was attributed to conscientiousness or responsibility factor. Conscientiousness or responsibility is associated with some characteristics such as effort, perseverance, steadfastness, dutifulness, and responsibility. Conscientious people are more committed to the work ethic, because they believe that it is essential to perform their duties fully and efficiently (Valiee, 2012). Despite having the knowledge of heavy duties and burnout in nursing occupation, they have high commitment to their work. This result as a great achievement shows the difference between nursing occupation and the other occupations. In other words, workaholism can improve working conditions in hospitals, but can cause problems in terms of psychological dependence and individual's personal life.

The comparison of personality factors and workaholism in nurses indicated that there was a significant relationship between workaholism and desired to work and compatibility dimensions. Previous studies showed that people who require high accuracy and concentration in their job are at greater risk of workaholism and spend so many hours to do their jobs (Hameed, 2013). Fatima, (2013) reported that the people with a strong desire to work,

are following innovative and new works, and performing routine tasks reduces their incentive (Hameed, 2013). Because need for achievement and desire to advance in these person cause them to spend a long time to their work (Osborne, 1999). Providing the peace of nurses at work leads to peace of mind, so they can work for long hours and can be involved in problems of patients. While, an inverse relationship was observed in neuroticism aspect, and the workaholism increased with increase of neuroticism score. This result is consistent with the finding of a similar study. In the mentioned study, there was a negative and significant relationship between neuroticism and workaholism. On other word, people who suffer from anxiety, stress and depression are not able to target setting and follow-up (Valiee, 2015). It can be supposed that the individuals with high neuroticism scores, devote less time to their works. In relation to the nurses, workaholism leads to increased anxiety, depression and stress, as well as increased their workaholism. Another study confirmed this result, in which neuroticism would be negatively related to satisfaction, Job promotion, and individual performance (Valiee, 2015). Costa and McCrae (2007) believed that individuals with high scores of neuroticism scale have irrational thoughts and also have a low level of adaptability with others and stressful situations (Costa and McCrae, 2008). The nurses with neuroticism personality do not have a suitable control on their behaviours, due to their characteristics such as a strong tendency to experience anxiety, irrational thoughts, depression, and having low self-esteem (Rahimi, 2014). Furthermore, the quality of care and their communication with patients are affected by the characteristics. On the other hand, annoying environment factors (such as noise, overcrowding, high volume of work, and mortality of patients in hospitals, etc.) have undesirable effects on the nurses with neuroticism personality. Moreover, these factors can increase their mistakes and errors and prevent them from providing appropriate services (Sharma and Sharma, 2011, Rafat, 2015).

Obtained results of Pearson correlation test on five-dimensions of personality and workaholism indicated that the extraversion and conscientiousness were not associated with workaholism. In extroversion dimension, there was a negative correlation. This result was inconsistent with previous studies on the relationship between extroversion and all three aspects of workaholism (Hameed, 2013). In general, the results of previous studies demonstrated that the person with extroversion score have high tendency to their works try to enjoy it. But, researchers' observations indicated that the studied nurses are alone, solitude and seclusion. Therefore, it is recommended that nursing officers should emphasize on the constructive interactions among nurses, encourage and reward them.

Results of the present study showed that there was no significant relationship between conscientiousness and workaholism, which this finding is consistent with the results of the previous studies. By contrast, Sharma, reported that there is a negative relationship between conscientiousness and workaholism (Sharma and Sharma, 2011). In the previous studies, there was a positive relationship between conscientiousness and workaholism. In other word, the workaholism in nurses increased with increasing conscientiousness. In general, conscientiousness in workers is attributed to the professionalism of the person (Valiee, 2012). The difference in our results can be attributed to differences in statistical population. Literature showed that people with high income and education, have more addictive behaviors to their work than others. Therefore, strengthening positive personality factors can be beneficial in the prevention of workaholism among nurses.

The results represented that there is a significant relationship between neuroticism dimension and workaholism, in which the high levels of neuroticism was associated with workaholism. Moreover, our results are consistent with previous studies, which reported that neuroticism is associated only with the inner desire to work. Due to individual exposures with different people and different demands in nursing job in terms of treatment and caring, it can cause severe stress, anxiety, and being nervous. The formation of phenomena such as work-family conflict, role conflict, and role overload can affect the appearance of neuroticism in a nurse (Jahangiri, 2016). Therefore, it is recommended that in first step, nursing managers should identify nurses at risk of workaholism. Next, they should also provide situations causing peace of mind, emotional stability, and reduced stress. In confirmation of our results, Shamara, (2014) reported that organizations can decrease anxiety and excitement by holding yoga and meditation sessions. In addition to these issues, promoting legal structures can play an important role in reducing anxiety (Sharma and Sharma, 2011).

Finally, there was an inverse relationship between desire to work and compatibility dimensions and workaholism. These results are consistent with cited study (Anisi, 2011), and are inconsistent with the findings of some previous studies (Valiee, 2012). In these studies a positive and significant relationship between desire to work and workaholism. Nurses with personality characteristic of eager to experience, see the same situation quite differently. In a related study, it was found that the eager to work people have a great desire to use new methods of treatment and care and are looking forward to finding new experiences.

Moreover, obtained results on compatibility dimension was relatively consistent with the findings of Burk, which showed that the compatibility has a negative relation with inner desire (Burke, 2006). While, these results were not consistent with some previous studies (Burke, 2006). In this regard the results of previous studies showed that the workaholism in some occupations such as nursing, in addition to having expertise need to have a love and

interest of their fellow human beings. Despite having the knowledge of workloads in nursing job, most of nurses have a high commitment to their work, which allows them to work long hours. This result as a great achievement shows the difference between nursing occupation and the other occupations. Therefore, in order to provide suitable working conditions, material and social prosperity of personnel should be considered.

Moreover, the results showed that the personality factors were negatively correlated with workaholism (Hameed, 2013). Nargesian, reported that a positive and significant relationship between workaholism and organizational commitment in nurses. In this regard it can be said the workaholism is beneficial for organizations, and this can improve the work conditions in hospital environments (Khaef, 2012). But, it can cause disrupt in physical and public health. It can also cause social dependency and disrupt in personal and family life. Therefore, it is recommended that nurses should not work excessive, and follow a moderate approach in their life and work.

#### 4. CONCLUSION

Workaholism studies are still in their early stages in Iran and require significant collaboration among researchers (Rasolabadi, 2015). Some concepts should be taught such as organizing the work, motivating employees, and more efforts of public relations department to provide more facilities in the work, which these concepts can prevent the workaholism phenomenon. In general, it can be concluded that when workaholism behaviors is excessive, it can become workaholism phenomenon, then it can cause significant risks to health. Workaholism can be considered as a main cause of occupational burnout in hardworking employees, which should be considered by authorities.

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